

PATENT COOPERATION TREATY

Plougmann & Vingtoft

14 OKT. 2005

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

WJM/SHA

To:

Plougmann & Vingtoft A/S
Sundkrogsgade 9
P.O. Box 831
2100 Copenhagen O
DANEMARK

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(PCT Rule 71.1)

Date of mailing
(day/month/year) 12.10.2005

Applicant's or agent's file reference
P34344PC01

IMPORTANT NOTIFICATION

International application No.
PCT/DK2004/000412

International filing date (day/month/year)
14.06.2004

Priority date (day/month/year)
17.06.2003

Applicant
HOPRO AS et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international
preliminary examining authority:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Schmidbauer, A
Tel. +49 89 2399-8222





PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P34344PC01	FOR FURTHER ACTION See Form PCT/PEA/416	
International application No. PCT/DK2004/000412	International filing date (day/month/year) 14.06.2004	Priority date (day/month/year) 17.06.2003
International Patent Classification (IPC) or national classification and IPC A61F2/30		
Applicant HOPRO AS et al.		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 11 sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>		
Date of submission of the demand 24.12.2004	Date of completion of this report 12.10.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Storer, J Telephone No. +49 89 2399-7247 	

INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITYInternational application No.
PCT/DK2004/000412**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

2, 6-9	as originally filed
1, 1A	received on 24.12.2004 with letter of 22.12.2004
3, 4, 4a, 5, 10, 11	filed with telefax on 29.09.2005

Claims, Numbers

1-14	filed with telefax on 29.09.2005
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Drawings, Sheets

1/4-4/4	as originally filed
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- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/DK2004/000412

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 8-14

because:

☒ the said international application, or the said claims Nos. 8-14 relate to the following subject matter which does not require an international preliminary examination (specify):

see separate sheet

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 8-14

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form ☐ has not been furnished

☐ does not comply with the standard

the computer readable form ☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.

☐ See separate sheet for further details

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/DK2004/000412

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-7
	No: Claims	
Inventive step (IS)	Yes: Claims	1-7
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-7
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

In accordance with Rule 67.1(iv) PCT, claims 8-14 are exempted from international preliminary examination, since they describe methods of medical treatment. In particular, the methods described in independent claims 8 and 13 both inherently include the step of implanting the device for preventing dislocation into a human (or animal) body and are therefore methods of treatment by surgery, which are exempted from examination (see the PCT International Search And Preliminary Examination Guidelines, 9.08-9.10).

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document:

D1: WO 00/57820 A (STOCKS GREGORY W) 5 October 2000 (2000-10-05)

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to this document):
a device suitable for preventing dislocation of a hip arthroplasty implant, the hip arthroplasty implant comprising an acetabular cup (46) to be mounted in the acetabular cavity of a pelvis, a femoral stem (34) to be mounted in the proximal end of a femoral bone and having a femoral neck (44), and a femoral head (42) to be mounted on the femoral neck and to be situated in a receiving cavity of the acetabular cup,
the device comprising
- a tubular collar (54) able to execute a restraining force opposing movements of the femoral bone leading to positions where dislocations can occur, the tubular collar having a first end (56) and a second end (58),
- first fastening means (62) for fastening the first end in fixed relation to and at least partly encircling the receiving cavity of the acetabular cup, and
- second fastening means (64) for fastening the second end in fixed relation to and at least partly circumventing the femoral neck to prevent longitudinal movement of the second end along the femoral neck and rotational movement of the second end around the femoral neck.

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/DK2004/000412

The subject-matter of claim 1 differs from this known device in that the tubular collar is formed in an elastic material with openings.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as being how to provide greater resistance to hip dislocation.

The solution to this problem proposed in claim 1 of the present application is considered to involve an inventive step (Article 33(3) PCT) since no document in the available prior art shows or suggests the use of a tubular collar formed in an elastic material with openings to solve the given technical problem. Indeed, the available prior art is concerned with capturing particulate debris generated by the articulation between the femoral head and the acetabular cup and is therefore seen to teach away from using a material with openings.

The industrial applicability of the invention is self-evident, therefore claim 1 satisfies the requirements of Article 33(2)-(4) PCT.

Since claims 2-7 are dependent on claim 1, these also meet the requirements of the PCT with respect to novelty and inventive step.

It is noted that claim 1 has not been correctly delimited with respect to the closest prior art (document D1), which would have been appropriate (Rule 6.3(b) PCT).